5.16.26 SAMPLING ASPHALT MATERIALS (Kansas Test Method KT-26)

a. SCOPE

This test method covers the procedures for sampling asphalt materials at the point of production and at destination. KT-26 reflects testing procedures found in AASHTO T 40.

b. APPARATUS

b.1. Sampling containers used shall conform to the following:

b.1.a. Asphalt Cements and Recycling Agents: Friction lid 1 L (1 qt) cans.

b.1.b. Cutback Asphalts: Large mouth screw top 1 qt (1 L) cans.

b.1.c. Emulsified Asphalts and Asphalt Rejuvenating Agents: Wide mouth plastic 1 gal (4 L) jars.

The containers must be free of solder flux or other material that might contaminate the sample.

b.2. Holding device for lowering the sampling containers through the entire depth of material to be sampled.

b.3. Supply of wiping rags.

b.4. Heavy, asphalt proof, heat resistant gloves.

b.5. Safety hat.

b.6. Plastic safety mask.

b.7. High top shoes or boots with trouser legs worn outside are recommended.

b.8. Other safety equipment as needed to protect the samplers.

c. SAMPLING PROCEDURES

Asphalt materials are currently accepted on the basis of a producer's certification of compliance for each shipment. To verify the certifications and to evaluate the producer's product control procedures, State representatives obtain random samples from shipping containers consigned to State work. Therefore, these sampling methods cover procedures for obtaining samples from shipping containers only.

c.1. Safety Precautions: Safety precautions are mandatory at all times when sampling and handling asphaltic materials. The precautions include but are not limited to the following:

c.1.a. Gloves must be worn and sleeves must be rolled down and fastened over the gloves at the wrist while sampling and while sealing containers.

c.1.b. Face shields must be worn while sampling.

c.1.c. There will be no smoking while sampling asphalts.

c.1.d. Do not hold the container in the hand during sampling by the valve method. Tongs or some other device must be used to hold the container while the sample is being taken.

c.1.e. The sampler must stand above and away from sampling valves as far as practical and on the windward side.

c.1.f. The sample must be taken slowly to prevent splashing of the hot material.

c.1.g. Place the container on a firm, level surface to prevent splashing, dropping or spilling the material during sealing.

c.1.h. Watch for asphalt products which have been spilled onto the loading platform of the truck or tank car. Walking on this material can be hazardous.

c.2. Thief Method. (This is the preferred method for sampling.)

c.2.a. Attach a new clean large-mouth or friction-top can to the holding device.

c.2.b. Remove the lid and slowly lower the holding device through the full depth of material being sampled. The rate at which the device is lowered should be such that the container will be filled when it reaches the bottom of the material.

c.2.c. Withdraw the device from the liquid, clean the outside of the container with dry wiping rags and transfer the contents to a clean, new container. Never use solvents or solvent saturated rags for cleaning sample containers.

c.3. Sampling Valve Method: The contents of shipping containers equipped with an approved submerged sampling valve may be sampled by this method.

c.3.a. Drain off and discard not less than 5 gal (20 L) of the material before taking the sample.

c.3.b. When practical, fill the sample container by holding it under the valve discharge pipe. If this procedure is not practical, permit the material to flow into a large, clean container and transfer a portion into a standard screw top container for transportation and storage.

c.3.c. Carefully clean the outside of the sample container with dry wiping rags. Never use solvents or solvent saturated rags for this purpose.